

forward primer

5'-atgatacgccagttttaagagaa-3' (SEQ ID NO:211)

reverse primer

5'-ttatttatgtatagaaacagcagtcctc-3' (SEQ ID NO:212)--

Conclusion

Applicants respectfully request entry of the amendments as set forth above. Applicants further request that examination of the application proceed in light of the application as amended herein.

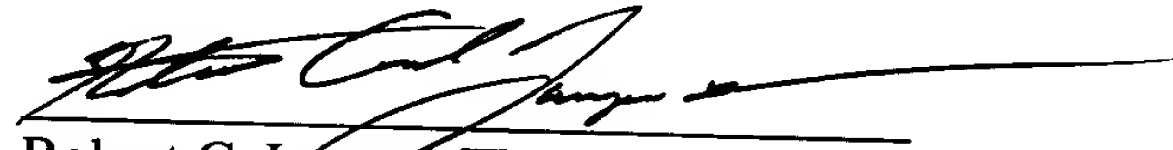
Applicants believe that incorporation of the amendments and consideration of the above remarks have placed this application in a condition for allowance. Early notification of a favorable consideration is respectfully requested.

Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of :

Richard LEPAGE *et al.*

Serial No.: 09/769,736

Filed: January 26, 2001

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Examiner: To be Assigned

Group Art Unit: 1645

For: Nucleic Acids and Proteins from Group B Streptococcus

Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

Washington, D.C. 20231

Version With Markings To Show Changes Made

At page 23, lines 14-24:

--All forward and reverse oligonucleotide primers incorporated appropriate restriction enzyme sites to facilitate cloning into the pcDNA3.1 MCS region. All forward primers were also designed to include the conserved Kozak nucleotide sequence 5'-gccacc-3' immediately upstream of an 'atg' translation initiation codon in frame with the target gene insert. The Kozak sequence facilitates the recognition of initiator sequences by eukaryotic ribosomes. Typically, a forward primer incorporating a BamH1 restriction enzyme site the primer would begin with the sequence 5'-cgggatccgccaccatg-3' (SEQ ID NO: 199), followed by a sequence homologous to the 5' end of that part of a gene being amplified. All reverse primers incorporated a Not I restriction enzyme site sequence 5'-ttgcggccgc-3' (SEQ ID NO:200). All gene-specific forward and reverse primers were designed with compatible melting temperatures to facilitate their amplification.--

At page 50, lines 3-7:

--ID-8 (17)

Forward Primer

5'-cgggatccgccaccatgACCACTTCTCAAGCTGTTTTAGC-3' (SEQ ID NO:153)

Reverse Primer

5'-ttgcggccgcACGATTATCAACAAAGTTCTG-3' (SEQ ID NO:154)--

At page 50, lines 9-13:

--ID-9 (18)

Forward Primer

5'-cggatccgccaccatgGCTACTCATATTGGAAGTTACCAGC-3' (SEQ ID NO:155)

Reverse Primer

5'-ttgcggccgcAGGGTTTATTTGTTGAAGTGTCTTG-3' (SEQ ID NO:156)--

At page 50, lines 15-19:

--ID-10 (22)

Forward Primer

5'-cggatccgccaccatgTATCTATATCATTTACCAATGCCC-3' (SEQ ID NO:157)

Reverse Primer

5'-ttgcggccgcTTTATGTATAGAAACAGCAGTCCC-3' (SEQ ID NO:158)--

At page 50, lines 21-25:

--ID-13 (28)

Forward Primer

5'-cggatccgccaccatgAAAGGAAGAACAACCTATTCGTTTAG-3' (SEQ ID NO:159)

Reverse Primer

5'-ttgcggccgcAAGAGCAAATTTTCGTATCTCCTC-3' (SEQ ID NO:160)--

At page 50, lines 27-31:

--ID-15 (32)

Forward Primer

5'-cggatccgccaccATGATTGTTGGACACGGAATTG-3' (SEQ ID NO:161)

Reverse Primer

5'-ttgcggccgcTTTTTCTTCCTCCAAAATAACACTAGC-3' (SEQ ID NO:162)--

At page 50, lines 33, extending to page 51, line 3:

--ID-17 (39)

Forward Primer

5'-cggatccgccaccatgGCGACTAAAGAGTTAGGTGTTAG-3' (SEQ ID NO:163)

Reverse Primer

5'-ttgcggccgcTATAGTTTTAGTTTCAACTTGTCTAGATG-3' (SEQ ID NO:164)--

At page 51, lines 5-9:

--ID-25 (20)

Forward Primer

5'-cgggatccaccatgTATACGAGTTTACAACCAAATCATG-3' (SEQ ID NO:165)

Reverse Primer

5'-ttgcggccgcGTCAGCTCGTACTGTTTTTTTAGC-3' (SEQ ID NO:166)--

At page 51, lines 11-15:

--ID-37 (51)

Forward Primer

5'-cggatccgccaccatgTGTCAAATGAATAGTGAACATAAAAG-3' (SEQ ID NO:167)

Reverse Primer

5'-ttgcggccgcCTCAAATAATTTACCTCCAATTTCG-3' (SEQ ID NO:168)--

At page 51, lines 17-21:

--ID-40 (51)

Forward Primer

5'-cggatccgccaccatgGCTCCATTCGAATTTAAAGATTC-3' (SEQ ID NO:169)

Reverse Primer

5'-ttgcggccgcTGATTTACCAGTTTGGAAGAGTTC-3' (SEQ ID NO:170)--

At page 51, lines 23-27:

--ID-42 (70)

Forward Primer

5'-cggatccgccaccATGAATACTATTTATAATACATTGAGAACAG-3' (SEQ ID NO:171)

Reverse Primer

5'-ttgcggccgcTTCTTTGTTCCAACCTTCTGG-3' (SEQ ID NO:172)--

At page 51, lines 29-33:

--ID-47 (86)

Forward Primer

5'-cggatccgccaccATGATAGAGTGGATTCAAACACATTTAC-3' (SEQ ID NO:173)

Reverse Primer

5'-ttgcggccgcTTTATGACTCAAGCGACGTGTTA-3' (SEQ ID NO:174)--

At page 52, lines 1-5:

--ID-48 94

Forward Primer

5'-cggatccgccaccATGGAGTTAGTAATTAGAGATATTCGTAAG-3' (SEQ ID NO:175)

Reverse Primer

5'-ttgcggccgcCTTGTCATATTCATCTCCCTTCAAC-3' (SEQ ID NO:176)--

At page 52, lines 7-11:

--ID-67 (3-40)

Forward Primer

5'-cggatccgccaccatgGCTAGTTTTGTCATGAATCATAATGAC-3' (SEQ ID NO:177)

Reverse Primer

5'-ttgcggccgcGTTATTTGCTCGTTGTTTAGCTAAATC-3' (SEQ ID NO:178)--

At page 52, lines 13-17:

--ID-68 (3-30)

Forward Primer

5'-cggatccgccaccatgGCTCTTAGTTTTTTTATGGTTTCAGTTCAAGC-3' (SEQ ID NO:179)

Reverse Primer

5'-ttgcggccgcGAAGGCACCGCCACCTCC-3' (SEQ ID NO:180)--

At page 52, lines 19-23:

--ID-69 (3-38)

Forward Primer

5'-cggatccgccaccatgGGTGAAACCCAAGATACCAATCAAGC-3' (SEQ ID NO:181)

Reverse Primer

5'-ttgcggccgcAACACCTGGTGGGCGTTTGG-3' (SEQ ID NO:182)--

At page 52, lines 25-29:

--ID-70 (141)

Forward Primer

5'-cggatccgccaccATGGCTGGGAATCGTAATAACG-3' (SEQ ID NO:183)

Reverse Primer

5'-ttgcggccgcAGCCGTCTCTAAAACAGGCTTG-3' (SEQ ID NO:184)--

At page 52, line 31, extending to page 53, line 1:

--ID-71 (3-20)

Forward Primer

5'-cggatccgccaccatgCTTCCAACGCAGCCGCAAAAC-3' (SEQ ID NO:185)

Reverse Primer

5'-ttgcggccgcATTAGTGTTATTTCTCCTGTTGCATAATCC-3' (SEQ ID NO:186)--

At page 53, lines 3-7:

--ID-72 (13)

Forward Primer

5'-cgggatccaccatgTACACGCATATTGTTGAAAAAAG-3' (SEQ ID NO:187)

Reverse Primer

5'-ttgcggccgcAAATAATTTCTTTTGGTTGTTTG-3' (SEQ ID NO:188)--

At page 53, lines 9-13:

--ID-73 (2-19)

Forward Primer

5'-cggatccgccaccatgAGTAATCAAGAAGTTTCAGCAAGC-3' (SEQ ID NO:189)

Reverse Primer

5'-ttgcggccgcCCATTGTGGAATATCAGCTGAAG-3' (SEQ ID NO:190)--

At page 53, lines 15-20:

--ID-74 (3-6)

Forward Primer

5'-cggatccgccaccatgGTGCAGGCAGTGGTACCGCT-3' (SEQ ID NO:191)

Reverse Primer

5'-ttgcggccgcGCGCATTGTAACAAATTCCTCAG-3' (SEQ ID NO:192)--

At page 53, lines 22-26:

--ID-75 (3-51)

Forward Primer

5'-cgggatccaccatgGCTGCCGAGAAGGATAAAG-3' (SEQ ID NO:193)

Reverse Primer

5'-ttgcggccgcATTATTTAGCTGCTTTTTTAATGG-3' (SEQ ID NO:194)--

At page 53, lines 28-32:

--ID-76 (3-56)

Forward Primer

5'-cgggatccaccatgTGTCAGGTTGTTTATGCAAGTTTTC-3' (SEQ ID NO:195)

Reverse Primer

5'-ttgcggccgcTTTACTAATTGATAAAGAGCAACTTCG-3' (SEQ ID NO:196)--

At page 53, line 34, extending to page 54, line 4:

--rib (control)

Forward Primer

5'-gggggtaccggccaccATGGCTGAAGTAATTCAGGAAGT-3' (SEQ ID NO:197)

Reverse Primer

5'-cggaattccgTTAATCCTCTTTTTTTCTTAGAAACAGAT-3' (SEQ ID NO:198)--

At page 56, lines 3-7:

--ID-1 (4)

forward primer

5'-atggaaaaaatacttgaaaaaattac-3' (SEQ ID NO:201)

reverse primer

5'-ctattttgttttagcgtgtttatc-3' (SEQ ID NO:202)--

At page 56, lines 9-13:

--ID-2 (5)

forward primer

5'-atgtcaaaacaaaaagtaacggcaac-3' (SEQ ID NO:203)

reverse primer

5'-ttatttatggccaataccataagttaattg-3' (SEQ ID NO:204)--

At page 56, lines 15-19:

--ID-6 (9)

forward primer

5'-atgaaaaaagttttttctcatggctatg-3' (SEQ ID NO:205)

reverse primer

5'-ttacttcaactgttgatagagcacttcc-3' (SEQ ID NO:206)--

At page 56, lines 21-25:

--ID-7 (15)

forward primer

5'-ttgttcaattttataggttttagaacttgg-3' (SEQ ID NO:207)

reverse primer

5'-ttaattttcattgcgtctcaaacc-3' (SEQ ID NO:208)--

At page 56, lines 27-31:

--ID-8 (17)

forward primer

5'-atgacaaaaaaacttattattgctatattag-3' (SEQ ID NO:209)

reverse primer

5'-ttaacgattatcaacaaagttctgtac-3' (SEQ ID NO:210)--

At page 56, line 33, extending to page 57, line 3:

--ID-10 (22)

forward primer

5'-atgatacgccagttttaagagaa-3' (SEQ ID NO:211)

reverse primer

5'-ttatttatgtatagaaacagcagtc-3' (SEQ ID NO:212)--